

mosquito breeding container according to the present invention having an insecticide applied to the egg laying structure and one control non-lethal mosquito breeding container having an untreated egg laying structure. The temperature is maintained at about 80° F. at a relative humidity of about 50%.

The mortality rate is determined by counting the number of deceased mosquitoes and live mosquitoes, adding these numbers together to arrive at the total number of mosquitoes exposed, and then dividing number of deceased mosquitoes by the total number of mosquitoes and multiplying that quotient by 100%. The mortality rate can be corrected using Abbott's formula as follows:

$$\left[ \frac{(\% \text{ dead mosquitoes example}) - (\% \text{ dead mosquitoes control})}{(100\% - \% \text{ dead mosquitoes control})} \right] \times 100\%$$

Abbott's formula is described in, Abbott, "A method of computing the effectiveness of an insecticide", J. Econ. Entomol. 18, pages 265-67 (1925).

While the invention has been described in detail and with reference to specific embodiments thereof, it will be apparent to those of ordinary skill in the art that various changes and modifications can be made to the claimed invention without departing from the spirit and scope thereof.

We claim:

1. A breeding container which is adapted to be lethal to mosquitoes comprising:

a cup having an internal volume for containing a sufficient amount of aqueous liquid to attract female container breeding mosquitoes;

a paddle being constructed and arranged such that female mosquitoes contact a surface of said paddle and lay eggs on said paddle, wherein at least a portion of the mosquito egg laying structure is above a maximum level of liquid in said cup; and

an insecticide that is lethal to mosquitoes present on said paddle in an amount sufficient to kill said female mosquitoes in contact with said surface.

2. A breeding container according to claim 1, wherein said paddle comprises paper.

3. A breeding container according to claim 1, further comprising a fastener for removably fastening said paddle to an inside surface of said cup.

4. A breeding container which is adapted to be lethal to container breeding mosquitoes comprising:

a stand-alone walled structure defining an internal volume, said walled structure being constructed and arranged to contain a sufficient amount of aqueous liquid to attract female container breeding mosquitoes within at least a portion of said internal volume;

at least one opening in said walled structure disposed so as to allow mosquitoes to enter said walled structure;

mosquito egg laying structure comprising a removable paddle in said internal volume having a surface texture which is suitable for female container breeding mosquitoes to land on and lay eggs on and being constructed and arranged such that at least a portion of the mosquito egg laying structure is above a maximum level of liquid in said walled structure; and

an insecticide that is lethal to mosquitoes present on said egg laying structure in an amount sufficient to kill said female mosquitoes in contact with said surface of said mosquito egg laying structure.

5. A breeding container according to claim 4, wherein said insecticide is present in said internal volume and is adapted

to soak into said mosquito egg laying structure upon application of an aqueous liquid into said internal volume.

6. A breeding container according to claim 4, further comprising at least one liquid regulating opening in said walled structure disposed so as to limit the maximum level of liquid in said internal volume.

7. A breeding container according to claim 4, further comprising at least one liquid regulating notch in said walled structure disposed so as to limit the maximum level of liquid in said internal volume.

8. A breeding container according to claim 4, wherein said insecticide is lethal to mosquito larvae and is present in an amount to kill larvae when present in said internal volume.

9. A breeding container according to claim 4, wherein said insecticide comprises at least one pyrethroid.

10. A breeding container according to claim 4, wherein said insecticide comprises at least one pyrethroid selected from the group consisting of deltamethrin, cypermethrin, cyfluthrin, and lambda-cyhalothrin.

11. A breeding container according to claim 4, wherein said insecticide comprises at least one carbamate.

12. A breeding container according to claim 4, wherein said paddle comprises paper having an exposed surface which can be held onto by a mosquito or which eggs can be supported thereon.

13. A breeding container according to claim 4, wherein said mosquito egg laying structure comprises paper.

14. A breeding container according to claim 4, wherein said walled structure is formed from a material selected from the group consisting of ceramic, glass, metal, paper, plastic, or wood.

15. A breeding container according to claim 4, wherein said walled structure is formed from plastic.

16. A breeding container according to claim 4, wherein said walled structure is formed from plastic having a color which is attractive to female mosquitoes.

17. A breeding container according to claim 4, wherein said walled structure is formed from plastic which is substantially black in color.

18. A breeding container according to claim 4, wherein said walled structure comprises a cup having at least one hole or notch in a side thereof.

19. A breeding container kit which is adapted to be lethal to mosquitoes comprising:

a stand-alone walled structure defining an internal volume, said walled structure being constructed and arranged to contain a sufficient amount of aqueous liquid to attract female container breeding mosquitoes within at least a portion of said internal volume, said walled structure having at least one opening disposed so as to allow mosquitoes to enter said walled structure; at least one mosquito egg laying structure comprising a removable paddle and being constructed and arranged to be at least partially disposed within said internal volume such that female mosquitoes contact a surface of said mosquito egg laying structure and lay eggs thereon, wherein said egg laying structure is constructed such that at least a portion of the mosquito egg laying structure is above a maximum level of liquid in said walled structure; and

an insecticide that is lethal to mosquitoes in an amount sufficient to kill said female mosquitoes in contact with said surface present on said egg laying structure, wherein said egg laying structure containing said insecticide being contained within a sealed package.

20. A kit according to claim 19, further comprising a fastening structure for fastening said at least one mosquito egg laying structure to said walled structure.